

miles inland from Long Island Sound, and just below the brow of a hill which rises to an elevation of five hundred feet above the sea level. Here in a sheltered, sunny location, along the base of a low cliff, the plant has found a congenial home and exhibits great vigor of growth, many of the racemes being fifteen inches in length. The station follows the line of the cliff for several rods.

Hierochloe borealis, Roem. & Schultes. In Connecticut this is essentially a species of the coast, and it is seldom found elsewhere. It occurs, however, in several bogs and meadows in Franklin, and it is abundant in one of them. These stations are noteworthy from being twenty miles back from the coast, in a typical hill town. Specimens gathered here do not differ noticeably from those collected in saline situations. In RHODORA vi. 104, this species is reported from Willoughby, Vermont, where it is said to be rare.

Eatonia Dudleyi, Vasey. This species appears to be better represented in southern Connecticut than has been supposed to be the case. In RHODORA vii. 68, I called attention to its frequent occurrence about New Haven. It is equally frequent in southeastern Connecticut. On several tramps last June through Franklin and adjacent towns, I found it in nearly every locality where one would naturally look for *Eatonia*, and it was often the prevailing species of this genus. It is not wholly confined to woodlands, for it grows in profusion in one place beside the New London Northern Railroad, where there is absolutely no shade, the trees having been cut away several years ago. The plants at this station are robust and very pubescent.

Cuscuta compacta, Juss. This species grows along all the principal streams of Franklin, and is by no means rare here.—R. W. WOODWARD, New Haven, Connecticut.

NEWLY OBSERVED STATIONS FOR MASSACHUSETTS PLANTS.

C. H. KNOWLTON.

DURING the past season I have made many botanical excursions in various directions from Boston, with some very interesting results. Messrs. William P. Rich and H. A. Purdie have been my companions on several of these trips, and the plants mentioned below are all represented by specimens in my herbarium, while many are also in

the herbarium of Mr. Rich. The following plants seem particularly worthy of mention:

Eragrostis minor, Host. This introduced grass is very abundant in the crevices and along the inner edge of the sidewalk, on Chandler Street, Boston, near Castle Square. I also collected it on the Centralville dump in Lowell, in 1902.

Allium tricoccum, Ait. I discovered the foliage of this plant in May, 1906, in rich moist woods by Clematis brook, Waltham, near *Asplenium acrostichoides*, Sw. When I revisited the station on July 7 the leaves had withered and the flower-buds were beginning to open. There were hundreds of plants, and the large round heads of white blossoms were very conspicuous. The plant has also been collected in the neighboring Beaver Brook Reservation, by Mr. R. A. Ware.

Allium vineale, L. I found a few plants of this species in the edge of a cultivated field on Rag Rock, Woburn. It is to be hoped that this pest will not prosper here, but remain an unusual plant.

Quercus Prinus, L. A few trees grow in sandy soil on the shore of Little Quittacas Pond in Lakeville. It is very abundant in Sutton, Worcester county, where it is the predominant tree in the woods around Purgatory Chasm. It is also frequent in Webster and Dudley, but I have not seen it near Boston.

Celtis occidentalis, L. Several trees grow in a pasture in Waltham, near Waverley. I found them first before the leaves came out, and visited them again the last of May, just as they were going out of blossom. The leaves and twigs seemed much diseased from the work of insect parasites. Small trees in better condition grow on Mt. Tabor in Lincoln (*C. H. Knowlton and E. L. Shaw*).

Nasturtium sylvestre, R. Br. This rare crucifer is very plentiful around a green-house in Natick, where it seems thoroughly established.

Potentilla fruticosa, L. One bush I have seen in a grassy swamp in Woburn, another larger in a similar place in Amesbury. In the northern part of Groton it grows in great profusion. This station was given by Mr. C. W. Jenks in the Middlesex Flora.

Amphicarpaea Pitcheri, T. & G. I found this growing in considerable abundance at Oak Island, Revere, where it was collected by Mr. Rich in 1893. (RHODORA, i. 27.) In general appearance as well as in several minor details it is distinctly different from the common species. Later in the season it was found by Mr. H. H. Bartlett in great abundance on Horn Pond Mt. in Woburn, only a mile or two from Mr.

Rich's original station in Winchester. Mr. M. L. Fernald also reports it from Rhode Island. (RHODORA, viii. 221).

Apios tuberosa, Moench. Mr. Rich and I found very many fine fruiting specimens of this common plant along the shores of Lake Monponsett, Halifax. Its usual mode of reproduction seems to be by rootstocks and tubers.

Desmodium cuspidatum, T. & G. In open woods, Horn Pond Mt., Woburn; also in moist oak woods, Natick.

Desmodium sessilifolium, T. & G. This plant, occasional in Connecticut and Rhode Island, was first reported in Massachusetts from Middleboro by William Boott (1870), and from Lakeville in 1871. The Lakeville station was visited in 1899 by members of the New England Botanical Club, and again this year by Mr. Rich and myself. The plant is still abundant at this place, along the dry sandy roadside near Lake Assawompsett. We also found a clump of very large specimens in an old orchard two or three miles away, and a large quantity further south, along the causeway between Little and Great Quittacas ponds, in Rochester. The fruit of this species sticks even closer than that of the common kinds, and further search would probably show that the plant is well distributed over this flat sandy region, where it finds its northeastern limit. Mr. John Murdoch, Jr. tells me it is still abundant at Middleboro.

Ilex opaca, Ait. A few good trees grow in the woods at Halifax, but no fruiting specimens were observed.

Viola arenaria, DC. I found an abundance of this in a dry clearing in Ashburnham, Worcester county. I have never seen it in the Boston region.

Viola sagittata, Ait. Abundant in moist sandy field, Kendal Green, Weston. Also in a similar situation near Cambridge reservoir, Lincoln. (C. H. Knowlton and E. L. Shaw.)

Aralia trifolia, Dec. & Planch. Moist woods, Burlington. Tophet Swamp, Lexington.

Hydrocotyle umbellata, L. This plant, so abundant on Cape Cod, seems even more plentiful in the northern part of Plymouth county. Messrs. Rich, Purdie and I found the submersed form in abundance at Indian Head Pond, Hanson. In Lakeville, at Little Quittacas Pond, where the water had been drawn off we found a belt some three rods wide of the terrestrial form, nearly surrounding the pond. The rootstocks formed an interlacing network, and one shore had

been plowed for nearly half a mile to destroy this plant and the few others which grew with it.

Chiogenes serpyllifolia, Salisb. A small station in the Hanson cedar swamp. (C. H. Knowlton and R. A. Ware).

Leucothoe racemosa, Gray. I have found one bush by the Charles River in Natick. It is abundant in wet woods at Halifax.

Hottonia inflata, Ell. The latter part of June Mr. J. W. Huntington of Amesbury showed me the station for this plant which he reported in RHODORA, iii. 216. July 7 I found a few plants in a small brook in Waltham, and the next day I came across large quantities in the ditch beside the Willow Road, Belmont.

Lysimachia producta, Fernald. There is a fine colony of this on the sandy shore of Silver Lake, Halifax.

Sabbatia chloroides, L. Large quantities of this in Halifax bring the plant a little nearer to Boston than previous reports.

Asclepias obtusifolia, Mx. This plant, reported "not common" in the Middlesex Flora, is frequent in the towns of Chelmsford, Westford, Dunstable, Groton and Tyngsboro, where the light glacial gravel favors it.

Echinosperrum Lappula, L. Abundant in roadside thicket, Groton; roadside, Winchester.

Linaria genistaefolia, Mill. I found a single plant of this rare waif, in good fruit and flower, on a railroad embankment in Groton. I do not know of any other station in New England.

Scrophularia leporella, Bicknell. I discovered a large clump of this well fruited, growing alone in a dry pasture at East Lexington, August 4.

Scrophularia Marilandica, L. There is a fine station for this on Concord Hill, Lexington, from which I collected good fruiting specimens Oct. 13. It was found here as early as 1903 by Miss E. L. Shaw. This place and Oak Island are the only stations known for it in the Boston region.

Galium boreale, L. I found some fine plants of this by a ditch in a mowing field, near Central Square, Woburn. It grew with all the assurance of a native, and there was no evidence of its being a garden escape.

Bidens comosa (Gray) Wiegand. Wet roadside, Warren, Worcester county.

Matricaria discoidea, DC. I found a fine specimen of this in

Winchester early in the summer. Mr. F. G. Floyd has also a station for this peculiar-smelling "pineapple weed" in West Roxbury.

Solidago sempervirens, L. Abundant in an open grassy swamp in Winchester, at an elevation of about 200 feet. I have also collected it on the East Lexington meadows.

BOSTON, MASSACHUSETTS.

THE VARIATIONS OF PRIMULA FARINOSA IN NORTHEASTERN AMERICA.

M. L. FERNALD.

Primula farinosa in its broad sense is a plant of very wide range, the typical form occurring in northern and mountainous districts of Eurasia and North America, while some representative of the species is found in nearly all cooler parts of the globe, even in Antarctic South America. The plant of eastern North America is very generally called true *P. farinosa*, and in Engler's *Pflanzenreich* nearly all the American plants are united by Pax and Knuth with the Eurasian plant as *P. farinosa*, subsp. *eufarinosa* Pax, var. *genuina* Pax.¹ As shown in the Gray Herbarium, however, there is very little American material which is clearly identical with the Eurasian type of *P. farinosa*. Instead, most of the material from the northeastern United States and adjacent British America is of two seemingly endemic varieties, while in the Rocky Mountains is a third which may be looked for with some confidence on the mountains of eastern Quebec. These three varieties and the Eurasian type of the species may be distinguished as follows.

* Calyx in anthesis 3–5 mm. long; involucral bracts 3.5–6 mm. long.

P. FARINOSA L. Low, rarely 3 dm. high: leaves oblanceolate to narrowly obovate, *white-farinose* beneath: bracts lance-attenuate: *pedicels rarely equalling the calyx*: capsule 6–8 mm. long, slightly exserted.—Sp. i. 143 (1753).—Eurasia. Rare in America: examined only from Labrador and Newfoundland.

Var. *AMERICANA* Torr. Scape 1–2.5 dm. high: leaves oblanceolate

¹ Pax & Knuth in Engler, *Pflanzenr.*, iv. Fam. 227, 83 (1905).